

LEARNING

MASTERCLASS

Learning Masterclass

Introduction

What is learning?

The Dictionary Says: "The acquisition of knowledge or skills through experience, study or by being taught."

"The key to pursuing excellence is to embrace an organic, long-term learning process, and not to live in a shell of static, safe mediocrity. Usually, growth comes at the expense of previous comfort or safety."— Josh Waitzkin

"Tell me and I forget, teach me and I may remember, involve me and I learn." — Benjamin Franklin

Why is it important?

Whether you are a student now, a person trying to move forward in their career or a business owner trying to stay ahead of the competition..

Learning, re-learning and doing it all efficiently is extremely important! Things are changing faster than ever in our world today and the skill of learning is going to be what keeps us ahead..

But it's not all about achieving!

- Want to learn meditation? These techniques will help.
- Want to learn how to be a better partner? These techniques will help.
- Want to learn a new language? These techniques will help.

The goal of this course is to help you be a more efficiently learner!

- This isn't a 'how to study for 14 hours a day' type of course..
- Instead we're going to look at what science says is the best way for us to learn EFFICIENTLY meaning more learning in less time..

- That means if you want to study for 6 hours GREAT you'll get more out of those 6 hours..
- But it also means if you have 15 minutes in between your next meeting GREAT you'll get the most out of those 15 minutes..

How this Masterclass works:

I have read what I believe to be some of the best books on learning:

- A Mind For Numbers
- How to Be a Straight A Student
- The Procrastination Equation
- Limitless
- How We Learn
- Make it Stick
- The Art of Learning
- Outliers
- The Practicing Mind
- Hyperfocus

Then I pulled out only the most practical, skill based and timeless principles from those books!

- Plus I added a few of my own experiences through my learning journey and that of my coaching clients..
- This course is for you, this course is for your future and this course is for your potential..

All of the the techniques we'll talk about are meant to be used..

- Honing in your learning skill via action is the name of the game!
- Don't just take notes here.. Follow along with the Mind Map and exercises below!
- They are designed to make this Masterclass stick!

Intensity

Work Accomplished = Time Invested x Intensity

Cal Newport one of our learning mentors today..

Says this about learning intensity:

"In fact, when asked what one skill was most important in becoming a non-grind straight-A student, most of them cited the ability to get work done quickly and with a minimum of wasted effort."

"So how do these students achieve this goal? A big part of the solution is timing—they gain efficiency by compressing work into focused bursts. To understand the power of this approach, consider the following simple formula:"

"Work accomplished = Time Spent x Intensity of Focus"

Let's do some Math! Fun right?

$100 = 100 \times 1$ or $100 = 10 \times 10$ That means that if you put intensity on a scale of 1 to 10 you can get 100 units of work done in either 100 hours or in 10 hours..

Higher intensity means lower total time invested (or more work done in the same amount of time).

- Leaving you with more time to relax, learn other things or do the job you really need to do!
- Learning to work in focused bursts is an insane effectiveness hack..
- Not only this.. But what I've noticed is it's really the only way to learn in a lasting way.

What does a focused burst look like?

First it looks like shutting off all of your distractions..

- Phone
- Social Media
- Emails

All of these things are going to absolutely wreck your ability to focus!

Next it looks like having one single thing to focus on.. With a goal!

Don't just go into a learning session without a goal.. Make a decision on what you want to learn!

Pro Tip Here: Something I call just in time learning. Most of my clients are business owners with changing schedules, demands and learning needs daily! This means they often don't have the luxury of learning just to learn.. Which actually in one way is helpful!

When they have to learn something 'just in time' for a project they know exactly what they need to learn and have immediate feedback..

What if you're not in that position? Well one thing you could do is create projects for yourself and learn just in time for those projects..

Want to learn Spanish? Plan to go to a Spanish restaurant and order only in Spanish in 1 month.

Want to learn to Code? Sign yourself up on a freelancing platform for a really low fee and learn as you go!

Each of these things pushes you into the real world.. Gives you things you know you need to focus on!

After that it's the skill of staying focused..

This is something unfortunately a lot of us have lost! With our attention splintered constantly by day to day life it's hard to stay focused on one thing anymore.

But here are a few tips:

1. Start a meditation practice. Turns out meditation and studying both use the 'back on track' muscle in our minds. Train it.
2. Play some focusing music. Something instrumental and rhythmic.
3. Take time in between intense learning sessions. These take more out of you than unfocused sessions and we need to respect our energy.

When? Where? How Long?

"The little things count. This is especially true when it comes to studying."

"Before we get caught up in the details of exactly how to review and synthesize material, there are some basic questions that we must address first: When during the day should you study? Where should you go to study? How long should you study before taking a break?"

"The right answers will boost your productivity, allowing you to squeeze more work out of even less time. The wrong answers will slow you down and make this process more difficult than it needs to be. Straight-A students, I found out, devote a lot of thought to these questions; they recognize how these seemingly little details can make or break their study efforts and have experimented extensively to discover the most effective strategies."

These are the three most important questions we can ask ourselves when it comes to learning! They really look into the learning environment which we tend to overlook.

When during the day should you study?

- Cal says in the book that you should study EARLY if you can.
- Get as much studying and intense work done as you can before you have to meet the demands of the day.
- For me: this course, the Mind Maps and any other learning I'm doing is done BEFORE I start work for the day.

Where should you study?

- Cal says that you should study in ISOLATION where possible.
- This could be a dedicated room in your house or school. An office with a closed door. Just ensure that you have as little distraction as possible.

How long should you study before taking a break?

- Focused work drains our energy! Taking frequent breaks allows us to recharge and bring our best selves back to the work.
- Cal recommends AT LEAST one break of 5-10 minutes every hour.

For me: I set my timer for 45 minutes and after that I take a 15 minute break to drink water, do a mini workout or just focus on breathing. Coming back refreshed.

Procrastination

"EXPECTANCY x VALUE / IMPULSIVENESS x DELAY"

I call Piers Steel a Procrastination Profession! He not only created that handy equation.. But he's another one of our mentors today!

"And there it is: the Procrastination Equation—inspired by the common elements that determine when we procrastinate, and crafted together from the most deeply researched elements of social sciences' strongest motivation theories."

"The Procrastination Equation accounts for every major finding for procrastination."

"As the deadline for any task gets pushed further into the future, Delay increases and our motivation to tackle the tasks decreases."

"Impulsiveness multiplies the effects of Delay, and so impulsive people feel the effects of time far less acutely, at least at first."

"Consequences have to be on their doorstep before they start paying attention to them—unless they are particularly large. And what makes consequences large? Expectancy and Value. The bigger the payoff and the greater the likelihood of receiving it, the sooner it will capture your attention."

I love when Psychology can be broken down into a mathematical formula.

Let's look at this formula a little deeper!

"EXPECTANCY x VALUE / IMPULSIVENESS x DELAY"

Expectancy: How confident are you in your ability to create whatever it is your aspire to create?

Value: Does whatever you're trying to create have real meaning to you?

Impulsiveness: Are you being easily sidetracked via immediate gratification?

Delay: How far in the future is your deadline?

How do we optimize the formula?

"EXPECTANCY x VALUE / IMPULSIVENESS x DELAY"

Increase our Expectancy and Value & Decrease Impulsiveness and Delay

Reflection time!

- Look at the last project (or the current) project you procrastinated on..
- What is your expectancy? How sure are you that you can achieve it?
- What is your value? Does this work have actual meaning to you?
- What is your impulsiveness? How likely are you to be distracted by instant gratification?
- What is your delay? How long is this project going to take to complete?

This book is full of techniques to help you balance each part of this equation!

Solved the Equation.. Now what?

Timothy Pyschyl our other procrastination mentor says that 'just getting started' is his number one tip for overcoming procrastination..

"Notice we are not using the famous Nike slogan of 'Just do it!' It's about just getting started."

"The 'doing it' will take care of itself once we get going. If we think about 'just doing it,' we risk getting overwhelmed with all there is to do. If we just take a first step, that is much easier."

"As a strategy, you may find that you have to just get started many times throughout the day, even on the same task. This is common. Even in meditation, we have to gently bring our attention back to our focal point, whatever that may be (e.g., our breath, a mantra). The thing to remember is that just getting started may happen many times in a day."

Don't worry about accomplishing anything.. Just get started!

Sounds pretty backwards right? Almost all personal development books focus on setting big goals and focusing your mind around them! But what if that is hurting you just as much (or more) than it's helping you?

When we set big audacious goals our minds see how much work it's going to be.. I mean no wonder we don't want to get started! We plan to work crazy hours, endure stress or any number of things we have planned for ourselves..

So should we resolve to not get anything done? No. That defeats the purpose of overcoming procrastination!

Instead. Let's focus on just getting started! Focus on getting 5 minutes into the task. This gives our minds enough time to switch states and get motivated..

This is THE SKILL to get good at.. Starting. Again and again. That leads to huge results!

MINDSET

Whether you think you can or you think you can't you're right!

This is coming straight from the guys who wrote Make It Stick! But they are actually citing another Amazing Author Carol Dweck.. 4 Mentors for the price of one!

"Let's return to the old saw 'If you think you can, or you think you can't, you're right.' It turns out there is more truth here than wit."

"Attitude counts for a lot. The studies of psychologist Carol Dweck have gotten huge attention for showing just how big an impact one simple conviction can have on learning and performance: the belief that your level of intellectual ability is not fixed but rests to a large degree in your own hands."

"Dweck's research has been triggered by her curiosity over why some people become helpless when they encountered challenges and fail at them, whereas others respond to failure by trying new strategies and redoubling their effort."

"She found that a fundamental difference between the two responses lies in how a person attributes their failure: those who attribute failure to their own inability—'I'm not intelligent'—become helpless. Those who interpret failure as the result of insufficient effort or an ineffective strategy dig deeper and try different approaches."

Want to increase your abilities? Change your mind first.

What are your thoughts on your own abilities? This is something important to keep in mind.. But also something we often ignore! Most of us have a running track of 'self-talk' in our minds.. A lot of that talk is negative!

Carol points out in her book just how much that is hindering our ability!

How might we overcome that 'Negative Self Talk'? Inside his book What to Say When You Talk to Yourself Dr. Shad Helmstetter gives us a process..

- First you need to be aware of the talk.. Catch yourself in the act!
- Next you need to know that it's not inherently true just because 'you' are saying it!
- Finally you need to reprogram it through using self talk to your advantage.

Effort Counts Twice!

Angela Duckworth (another mentor) tells us that $\text{Talent} \times \text{Effort} = \text{Skill}$ and $\text{Skill} \times \text{Effort} = \text{Achievement}$. (Effort counts twice).

"I have been working on a theory of the psychology of achievement since Marty scolded me for not having one. I have pages and pages of diagrams, filling more than a dozen lab notebooks. After more than a decade of thinking about it, sometimes alone, and sometimes in partnership with close colleagues, I finally published an article in which I lay down two simple equations that explain how you get from talent to achievement."

$\text{Talent} \times \text{Effort} = \text{Skill}$ --- $\text{Skill} \times \text{Effort} = \text{Achievement}$

"Talent is how quickly your skills improve when you invest effort. Achievement is what happens when you take your acquired skills and use them. Of course, your opportunities—for example, having a great teacher—matter tremendously, too, and maybe more than anything about the individual. My theory doesn't address these outside forces, nor does it include luck. It's about the psychology of achievement, but because psychology isn't all that matters, it's incomplete."

"Still, I think it's useful. What this theory says is that when you consider individuals in identical circumstances, what each achieves depends on just two things, talent and effort. Talent—how fast we can improve a skill—absolutely matters. But effort factors into the calculations twice, not once. Effort builds skill. At the very same time, effort makes skill productive."

Why Effort is Important

Angela points out here that Psychology of Achievement is not the only thing that plays into success.. But if you take two individuals in the same situation then Effort is going to be the determining factor!

This is more true now than ever! We are all on a much more even playing field now.. More information and access than ever before.. Effort is more important than ever.

Effort is a force multiplier.. Because it counts twice! It's also the main one that is within our control.. Plus it's trainable! And an almost endless quantity of effort is available..

How Much Effort do You Put in?

Angela Quotes Will Smith in This Chapter

"I've never really viewed myself as particularly talented... Where I excel is ridiculous, sickening work ethic."

"The only thing that I see that is distinctly different about me is: I'm not afraid to die on a treadmill. I will not be outworked, period. You might have more talent than me, you might be smarter than me, you might be sexier than me. You might be all of those things. You got it on me in nine categories. But if we get on the treadmill together, there's two things: You're getting off first, or I'm going to die. It's really that simple."

Can you Adopt That Mindset? The treadmill is just a metaphor for life.. How much effort are you exerting when it comes to getting what you want out of it?

Fluency Illusion

The number one enemy of effective learning!

It comes straight from the guys at Make It Stick again and they tell us that almost everyone falls for this trap!

"Learning is deeper and more durable when it's effortful. Learning that's easy is like writing in sand, here today and gone tomorrow"

"We are poor judges of when we are learning well and when we're not. When the going is harder and slower and it doesn't feel productive, we are drawn to strategies that feel more fruitful, unaware that the gains from these strategies are often temporary."

"Rereading text and massed practice of a skill or new knowledge are by far the preferred study strategies of learners of all stripes, but they're also among the least productive. By massed practice we mean the single-minded, rapid-fire repetition of something you're trying to burn into memory, the 'practice-practice-practice' of conventional wisdom. Cramming for exams is an example."

"Rereading and massed practice give rise to feelings of fluency that are taken to be signs of mastery, but for true mastery or durability these strategies are largely a waste of time."

How fluent are you on a certain topic?

Turns out we're not that good at estimating this.. When we re-read something it gives us a feeling of 'familiarity' that can often mask as fluency! But when it comes time to take action on a certain piece of information we need to be FLUENT not FAMILIAR..

Why is Fluency important?

Let's say your job is to make decisions.. (Most high paying jobs involve decision making). Often you'll need to make decisions quickly.. Without time to reference material that you once read! Being familiar with a topic can give you a false sense of security that you understand it.. Leaving you open to making decisions on bad information! So how do we ensure we're fluent? Start by throwing away most of the study practices that are so common..

- Re-reading a particular text
- Cramming the night before a test
- Taking the same practice test over and over

Then we're going to add in some of the practices inside this book! These practices end up being more energy and attention demanding.. But they lead to real brain changes vs temporary learning!

Overcoming the fluency illusion!

Here is another take on the fluency illusion by Benedict Carey! Another learning mentor.

"Let's recall the Bjorks' 'desirable difficulty' principle: The harder your brain has to work to dig out a memory, the greater the increase in learning (retrieval and storage strength)."

"Fluency, then, is the flipside of the equation. The easier it is to call a fact to mind, the smaller the increase in learning. Repeating facts right after you studied them gives you nothing, no added memory benefit."

"The fluency illusion is the primary culprit in below-average test performances. Not anxiety. Not stupidity. Not unfairness or bad luck. Fluency."

"The best way to overcome this illusion and improve our testing skills is, conveniently, an effective study technique in its own right."

"The technique is testing itself. Yes, I am aware of how circular this logic appears: better testing through testing. Don't be fooled. There's more to self-examination than you know. A test is not only a measurement tool, it alters what we remember and changes how we subsequently organize that

knowledge in our minds. And it does so in ways that greatly improve later performance.”

"Getting It"

Do you know that feeling when you're reading or studying of 'getting it'?

That feeling is Perceived Fluency. And it feels great! But it's very dangerous.. Because repeating something directly after learning it is easy.. But remembering it long enough to put it on paper when your tested.. Or integrate it into your daily life is much different!

Overcoming The Fluency Illusion

Create 'Desirable Difficulty' the best way to do that is to test yourself..

1. Close the book/video/course and ask yourself.. What was that chapter, video or lesson about?
2. See if you can actively retrieve the information you're learning.. This will pop the fluency bubble if you don't really know it! This actually can be quite uncomfortable

*I create this desirable difficulty by trying to recite my entire mind map video in my head on my one hour walk before I ever do the video! This makes sure I really know the material and won't forget something half way through the video!

But this was incredibly difficult the first few times and still sometimes is if I didn't spend enough time with the material.. or if it's a new concept for me

QUIZ TIME

What is the most important part of learning? Well.. It's actually the tests!

How backwards is that? The things we're studying for actually are the things we should use to study! More from Make It Stick:

"A child stringing cranberries on a thread goes to hang them on the tree, only to find they've slipped off the other end."

"Without the knot, there's no making a string. Without the knot, there's no necklace, there's no beaded purse, no magnificent tapestry. Retrieval ties the knot for memory. Repeated retrieval snugs it up and adds a loop to make it fast."

"Today, we know from empirical research that practicing retrieval makes learning stick far better than reexposure to the original material does. This is the testing effect, also known as the retrieval-practice effect."

"To be most effective, retrieval must be repeated again and again, in spaced out sessions so that the recall, rather than becoming a mindless recitation, requires some cognitive effort. Repeated recall appears to help memory consolidate into a cohesive representation in the brain and to strengthen and multiply the neural routes by which the knowledge can later be retrieved."

Looking to learn something? Retrieve the information! (Again and Again). This is the first strategy we'll employ when trying to learn a new subject..

Retrieval (or remembering what you've read listened too or watched) without reference! This action synched up the knot of learning.. Each time you retrieve something it gets a little tighter and a little tighter!

How might it work?

When reading a book: close the book and try to remember what you just learned.

When watching a video: pause the video and try to remember the main points. Learning from a mentor: after the session try to go over the conversation in your head.

How to learn FASTER

This idea comes from another Mentor Jim Quick!

"The acronym FASTER stands for Forget, Act, State, Teach, Enter, Review. Here's the breakdown:

"F is for Forget - The key to laser focus is to remove or forget that which distracts you."

"A is for Act - Traditional education has trained many people that learning is a passive experience. You sit quietly in a class, you don't talk to your neighbor, and you consume the information. But learning is not a spectator sport. The human brain does not learn as much by consumption as it does creation."

"S is for State - All learning is state dependent. Your state is a current snapshot of your emotions. It is highly influenced by your thoughts (psychology) and the physical condition of your body (physiology)."

"T is for Teach - If you want to cut your learning curve dramatically, learn with the intention of teaching the information to someone else. Think about it: If you know you have to give a presentation on what you learn, you will approach how you learn the topic with the intention of mastering it well enough to explain it to someone else."

"E is for Enter - What is the simplest and most powerful personal performance tool? Your calendar. We enter important things on our schedule. Do you know what a lot of people don't schedule? Their

personal growth and development. If it's not on your calendar, there's a good chance it's not getting done."

"R is for Review - One of the best ways to reduce the effects of the forgetting curve is to actively recall what you learned with spaced repetition."

How I use the FASTER model with these Mind Maps! (And you can too).

Forget: Before each and every Mind Map and while reading I do two things.

1. I turn off my phone and all applications on my computer.
2. I set a 45 minute Pomodoro timer that signals my mind to focus on the task at hand.

Act: Mind Mapping building acting into the process of learning..

While you're reading and note taking you move the nodes around and fit them into an actionable piece rather than lines on a page..

State: MUSIC! This is super important for me while Mind Mapping. Each time I start the Pomodoro timer I also hit a music playlist that is all instrumental and gets me into a focused and flow like state.

Teach: That's what these videos are! Teaching is the most important part of this formula for me..

I didn't realize this until recently but now I see it everywhere.. I even remember what I read better if I mouth the words as I read!

Enter: These videos are a perfect example of entering.. Each week I am committed to making one video! That is one book a week.. Something not many people are willing to commit too!

Review: Saving the Mind Maps and coming back to them is very important.. That's for sure!

But one other type of review I do inside the Mind Maps is actually recalling how the book I'm reading connects to other books. (See the last point about Cal Newport and Nir Eyal).

Varied Practice

Don't just hit fastballs..

This one is coming from our friends in Make it Stick again!

"When the baseball players at Cal Poly practiced curveball after curveball over fifteen pitches, it became easier for them to remember the perceptions and responses they needed for that type of pitch: the look of the ball's spin, how the ball changed direction, how fast its direction changed, and how long to wait for it to curve."

"Performance improved, but the growing ease of recalling those perceptions and responses led to little durable learning."

"It is one skill to hit a curveball when you know a curveball will be thrown, it is a different skill to hit a curveball when you don't know it's coming. Baseball players need to build the latter skill, but they often practice the former, which, being a form of massed practice, builds performance gains on short-term memory."

"It was more challenging for the Cal Poly batters to retrieve the necessary skills when practice involved random pitches. Meeting that challenge made the performance gains painfully slow but also long lasting."

Short term impediments make for stronger learning. 'Desirable Difficulties'.

When we're learning something new we often want to make the process as easy as possible..

Today (outside of school) this looks like learning via following a YouTube video step by step! YouTube is an amazing tool.. But just because we've been able to follow a video doesn't mean we 'know' the thing!

This opens an interesting line of thinking.. When do we need to 'know' something and when do we just need to get something done?

I often think of this like a programmer would.. If you have to do it twice it's better to write some code to do it! So if you're just doing something once don't bother to take the time to learn it deeply or practice it in a more difficult 'less tutorial video' way.. It's not a good time investment!

But if you're planning to do it more than once it will be worth it long term to learn the thing deeply.. Perhaps by learning it deeply you'll spot something you might not have otherwise..

- A more efficient way to do the task..
- Maybe the task isn't necessary..
- Perhaps you could create a product or service from the task and add it to your offerings..

What does this look like in the real world?

Instead of practicing something via repetition we want to make that thing more difficult.. Often we'll watch a video of how to do something step by step and just follow along with the video vs shutting off the video and starting from scratch! When I first started my advertising business I wanted to learn EVERYTHING from scratch..

- Graphic Design
- Copywriting
- Paid Advertising
- Split Testing

- Landing Page Building
- Offer Creation
- Email Marketing

Even if I wasn't going to be the best person to do it long term it gave me the most comprehensive look into everything the company did! Which is invaluable long term. (Even though it was frustrating at first).

Mix well for best results!

Benedict Carey tells us how mixing up our practice overcomes the fluency illusion..

"It's not that repetitive practice is bad. We all need a certain amount of it to become familiar with any new skill or material."

"But repetition creates a powerful illusion. Skills improve quickly and then plateau."

"By contrast, varied practice produces a slower apparent rate of improvement in each single practice session but a greater accumulation of skill and learning over time. In the long term, repeated practice on one skill slows us down."

Don't Practice One At a Time

This is another way to create a level of desirable difficulty in your studying techniques.. Are you trying to learn more than one thing at a time?

Don't focus on one subject until completion.. Switch between the subjects. Bonus points if you try to look for the What If level of learning

Trying to learn one specific thing? Try to learn it using different mediums in different places!

How I Use This:

I'm a very non-linear thinker.. I sucked in school! They always want you to study one thing until you know it inside and out.. That never seemed interesting to me!

So now what I do is say ok I want to learn about several different topics..

- Health
- Mind and Emotions
- Business
- Relationships
- Finances
- Social life
- Spirituality

Then I split that into the books I think might be interesting on that topic.. After that I switch back and forth between topics..

Sometimes you'll notice me quoting a health book on a Mind Map about a business book.. This is me attempting to create a framework to think from that is diverse

Teach

Can you teach?

Last one from Benedict!

"Many teachers have said that you don't really know a topic until you have to teach it, until you have to make it clear to someone else."

"Exactly right. One very effective way to think of self-examination is to say, 'Okay, I've studied this stuff; now it's time to tell my brothers, or spouse, or teenage daughter what it all means.' If necessary, I write it down from memory. As coherently, succinctly, and clearly as I can."

"Remember: These apparently simple attempts to communicate what you've learned, to yourself or others, are not merely a form of self-testing, in the conventional sense, but studying—the high-octane kind, 20 to 30 percent more powerful than if you continued sitting on your butt, staring at that outline."

"Better yet, those exercises will dispel the fluency illusion. They'll expose what you don't know, where you're confused, and what you've forgotten—and fast."

Teaching

There is an interesting phenomenon where we feel like we really need to know something in order to be able to teach it.. While I believe that's true at a high level such as in schools, business and paid coaching.. It's simply not true in life!

We learn so much from teaching.. From trying to formulate things in our own mind in order to articulate it to people. We learn what we don't know enough about as well when we can't explain a topic to someone

How to Be a Teacher

1. Use the learning techniques we've talked about first
2. Create some sort of work (Mind Map, Thought Structure or Presentation)
3. Teach it to someone! (Anyone who will listen even if that's only you).

*I have remembered so much more from the books I've taught you than I ever would have if I hadn't created the videos

Explain it like I'm five!

Barbra Oakley in her amazing book A Mind For Numbers gives us this gem!

"The legendary Charles Darwin would do much the same thing. When trying to explain a concept, he imagined someone had just walked into his study."

"He would put his pen down and try to explain the idea in the simplest terms. That helped him figure out how he would describe the concept in print. Along those lines, the website Reddit.com has a section called 'Explain like I'm 5' where anyone can make a post asking for a simple explanation of a complex topic."

"You may think you really have to understand something in order to explain it. But observe what happens when you are talking to other people about what you are studying. You'll be surprised to see how often understanding arises as a consequence of attempts to explain to others and yourself, rather than the explanation arising out of your previous understanding. This is why teachers often say that the first time they ever really understood the material was when they had to teach it."

Understanding arrives as a consequence of explaining..

Often we think the opposite don't we? Teachers should know everything about a topic before they even start teaching!

Actually.. This way makes more sense! Only by teaching do they uncover what they don't know. When you know a lot about a topic it's easy to take pieces of it for granted instead of knowing everything from first principles..

So why explain like they are five?

The more complex an idea is the easier it is to memorize something and not truly understand it..But if you want to build a truly steady base of knowledge in everything you have to start from the base!

If you had to explain it to a five year old you would be forced to start from first principles vs taking memorized information for granted!

What is a five year old's favorite word?

WHY

A great exercise to do when learning something is to ask yourself WHY 5 times in a row..

This makes sure you know the topic from first principles vs a memorization.

Relax to Remember

Learning isn't always done at full tension..

Chris Bailey shares inside his book Hyperfocus a different state: Scatterfocus!

"Hyperfocus can help you get an extraordinary amount done in a relatively short period of time."

"Scatterfocus lets you connect ideas—which helps you unearth hidden insights, become more creative, plan for the future, and rest."

"Together they will enable you to work and live with purpose."

"Your attention is the most powerful tool at your disposal to live and work with greater productivity, creativity and purpose. Managing it well will enable you to spend more time and energy on your most purposeful tasks and to work more often with intention, focus for longer periods, and stumble into fewer unwanted daydreams."

"I hope you spend it wisely."

ScatterFocus is the final point in this book and I'm glad it was added..

Life isn't all about straight line 'Getting Things Done' we need to make time and space for connecting dots that seem unconnected.. ScatterFocus for me happens best when I'm out for a walk..

I let my mind wander around a particular point in my life.. Maybe it's business, relationships, health or happiness! But instead of having an intention I simply allow what comes up to come up!

After spending time in ScatterFocus I tend to have an idea for a project or something to work on..

Want a high quality life? Pay attention to your attention.. Know when to use what mode!

Setting up camp!

This one is coming from Barbara again..

"One way to think of the diffuse mode is as a base station when you are mountain climbing."

"Base stations are essential resting spots in the long journey to difficult mountaintops. You use them to pause, reflect, check your gear, and make sure you've got the right route picked out."

"But you would never confuse resting at a base station with the hard work of getting to the top of the mountain. In other words, just using your diffuse mode doesn't mean you can lollygag around and expect to get anywhere."

"As the days and weeks pass, it's the distributed practice—the back and forth between focused-mode attention and diffuse-mode relaxation—that does the trick."

Learning is like climbing a mountain!

There are times when we need to rest(Diffuse Mode).

This is taking your mind off what you're currently studying.. Letting the subconscious mind connect the dots! Things like going for a walk, taking a nap or having a shower are examples.. Ever wonder why you get your best ideas in the shower? That's why!

And times where we need to lug ourselves up the mountain (Focused Mode). This is where we do the hard work of learning, studying, reading, listening or watching material on our subject of choice.. In order to make connections we first need points to connect.. Information we learn (ideally) during focused sessions of study!

How are you keeping the balance? Everest can't be climbed in a day..

Actually you need scheduled breaks just to survive up there!

Are you scheduling breaks for Diffuse Mode thinking? Taking walks, meditating or just lying down can lead to some serious connections being made in your mind!

But there is going to be a heck of a lot of climbing! Hard work is necessary. No one is saying you can diffuse your way to competence in a subject!

Just knowing that there are two different mode gives us something though.. It allows us to focus HARDER for shorter periods of time!

Knowing we can take a nap after a couple hours of studying does wonders for our focus!